The ANI Nursing Informatics Emerging Leaders Program will provide me with the mentorship and leadership skills to become a leader of an informatics-related organization. While my employment and academic training has been in the development of health information technology for underserved populations, participating in the ANI nursing informatics emerging leaders program will help facilitate me becoming a leader in the field. For the past 4 years I have taught the core informatics course in the DNP program at Columbia University School of Nursing. In addition, I have served multiple roles ranging from project director to PI on informatics based projects. I served as a consultant for HIV TIPS, a web-based decision support system to assist with management of medication regimens for Persons Living with HIV (PLWH) (HRSA SPNS Initiative). I was later a Co-I on a HRSA funded project which developed an electronic continuity of care document (CCD) to support HIV care within NewYork-Presbyterian SelectHealth, a Medicaid managed care organization. My work on this project attempted to reduce health inequities among PLWH by promoting care by providing minorities and economically disadvantaged patients access to their health information. At the same time, I was the project coordinator for Wireless Informatics for Safe and Evidenced Based Care for APNs (WISE-APN), which was a 6 year HRSA funded project that integrated informatics principles into the Columbia University School of Nursing curriculum. Later, I led the ViP project, which supported the development and testing of an infrastructure for delivering web-based tailored symptom management strategies for PLWH.

My most recent work has been focused on HIV prevention and testing. Currently, I am funded by a K12 award in a study entitled “Using Queuing Theory to Improve HIV testing in the Emergency Department (ED).” to understand the implementation of the New York State HIV testing law in the ED by examining the workflow and information needs of ED clinicians, staff and administrators. Careful consideration of the cost of various HIV testing delivery models is necessary to best implement the New York State testing legislation. This study seeks to compare the cost efficiencies of different HIV testing delivery models.

At the same time, I am the PI of a study funded by New York State to examine adolescents’ use of mobile technology for obtaining health information. In the first part of this study, we conducted focus groups with adolescents to understand how they access health information and their current uses of mobile technology conducted an ecological momentary assessment by sending bi-weekly text messages to adolescent participants to inquire about their health information needs and their use of mobile technology to meet those needs. Following the 30 days, we conducted focus groups with 41 high-risk high school students to understand their beliefs and attitudes about condom use and HIV testing.

Building on my earlier work, the goal of the proposed leadership project is to identify acceptable and appropriate features for a mobile app for meeting the HIV prevention and health care needs of
PLWH, including adherence to HIV medications, prevention with positives, retention in care and treatment management. The purpose of this project is to conduct formative work to understand the needs, barriers, and facilitators of using mobile phone applications (apps) for HIV prevention, testing, treatment and care.

The United States HIV continues to exact a huge toll. New York City, the setting of our study, has the largest HIV/AIDS epidemic in the nation, making it the ideal setting for the formative research study. Mobile health technology shows potential as a highly valuable tool in the management and prevention of chronic illnesses such as HIV. The ubiquitous nature of mobile technologies, namely smartphones, in daily life has created opportunities for applications that were not previously possible.

Qualitative ethnographic methods and user-centered human-computer interaction research methods will be used to identify the mobile technology needs of users, mobile app design preferences, as well as the barriers and facilitators that prohibit or encourage the uptake and sustained use of mobile apps for HIV prevention. The sample will include 50 PLWH and 30 HIV healthcare providers. I will use qualitative and quantitative research methods to ensure that the app meets the end-user's goals. This project will be guided by the Information Science Research Framework in which various design processes are employed. Findings from this work will inform future HIV prevention, testing, treatment and care apps for Smartphones and other new media technologies for HIV prevention and will identify technology preferences and features, HIV related content requirements, and design specifications.

Through this program, I hope to gain a variety of skills to improve my leadership abilities and ultimately develop into an individual capable of leading an informatics-related organization. In particular, participation in the ANI, AMIA and HIMSS meetings will enhance my communication and networking skills. In combination with the proposed project and mentorship from an experienced informatics leader, I hope to gain skills in strategic planning and leading and managing change which are intrinsic to understanding the necessary elements for successful policy implementation.

To achieve these goals, the mentorship from the ANI emerging leaders program will provide the necessary support to enable me to become an informatics leader. The resources and expertise that are available through this program, coupled with my clinical training and advanced preparation in research methods will provide me with the skills and experience needed to become a nursing informatics leader.